

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009264**Date Inspected:** 27-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Guo Yanfei, Mr. Lu Li Qing, Mr. Zhu Zhong Hai, Mr. Li Zhi Jiang

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 2

This QA Inspector observed ZPMC welder Mr. Rao Wei, stencil 049972 is using shielded metal arc welding procedure specification WPS-B-T-2112 to tack OBG floor beam stiffener plate fillet weld FB3053-001-014. This QA Inspector observed a welding current of approximately 160 amps, the base material is clean where the tack welds were being made, and Mr. Rao Wei is certified to make this weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Ma Ying stencil 045270 is using submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to make groove weld SEG-061*-006 attaching OBG deck plates. This QA Inspector observed a welding current of approximately 580 amps and 33.0 volts. This QA Inspector observed that Ms. Ma Ying is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Ms. Zou Dianqin, stencil 250050 is using submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to make groove weld SEG-061*-009 attaching OBG deck plate DP290-001 to deck plate DP128-001. This QA Inspector observed a welding current of approximately 580 amps and 33.0 volts. This QA Inspector observed that Ms. Zou Dianqin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 3

This QA Inspector observed ZPMC welder Ms. Chen Fenglian, stencil 206623 has completed using the flux cored welding process to make OBG Corner Assembly weld CSD5-PP95. This welding had been monitored by ZPMC QC Inspector Mr. Guo Yuan Ting who had previously recorded a welding current of 306 amps and 29.9 volts. This QA Inspector confirmed that Ms. Chen Fenglian is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 9

This QA Inspector observed ZPMC welder Mr. Jiang Tin Guang, stencil 062265 has used flux cored welding procedure specification WPS-B-T-2133 to make deck plate weld DP3025-001-186. This weld attaches a stiffener plate to the inside of a closed rib that will be installed on OBG deck panel DP3025-001. This QA Inspector observed ZPMC QC Inspector Mr. Zhang Qiao has recorded a welding current of 209 amps 25.7 volts. This QA Inspector confirmed that Mr. Jiang Tin Guang is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xu Guoyin stencil 059443 is using flux cored welding procedure specification WPS-B-T-2133 to make deck plate weld DP3025-001-173. This weld attaches a stiffener plate to the inside of a closed rib that will be installed on OBG deck panel DP3025-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed. This QA Inspector observed a welding current of approximately 200 amps 25.7 volts and Mr. Xu Guoyin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 13

This QA Inspector observed ZPMC welder Ms. Wang Min, stencil 044771 has used welding procedure specification WPS-B-T-2221-B-L2c-S-2 to make submerged arc groove weld SEG065A-008. This QA Inspector observed ZPMC Quality Control personnel have recorded a welding current of 581 amps and 31.5 volts. This QA Inspector confirmed that Ms. Wang Min is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Li Jiao, stencil 049861 is using shielded metal arc welding procedure specification WPS-B-P-2211-B-U2-FCM-1 to make tack weld SEG068*-007 which attaches base plate BP190-001 to BP082-001. This QA Inspector observed a welding current of approximately 150 amps. This QA

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Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

The QA Inspector observed ZPMC welder Mr. Wang Wei, stencil 205097 is using shielded metal arc welding procedure specification WPS-B-P-2113 to tack weld a diaphragm plate to deck plate DP235-001. This QA Inspector observed a welding current of approximately 150 amps and Mr. Wang Wei is certified to make this weld.

This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

The QA Inspector observed ZPMC welder Mr. Pan Wei, stencil 218662 is using shielded metal arc welding procedure specification WPS-B-P-2113 to tack weld a diaphragm plate to deck plate DP180-001. This QA Inspector observed a welding current of approximately 150 amps and Mr. Pan Wei is certified to make this weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
